

# MARINE CORPS WARFIGHTING LABORATORY

The purpose of the **Expeditionary Tactical Communications System (ETCS)** is to provide voice and data, over-the-horizon (OTH), on-the-move (OTM) communications to the mounted and dismounted tactical warfighter. ETCS will provide the OTH communications backbone during the MCWL-sponsored Sea Viking Advanced Warfighting Experiment (AWE) campaign. For instance, ETCS will facilitate OTH communications for teams in an experimental Distributed Operations environment during the Sea Viking 06AWE.

**Background:** The Marine Corps Combat Development Command (MCCDC) identified the need for an OTH tactical communications capability to support Expeditionary Maneuver Warfare (EMW) that is not currently met by any Program of Record. This requirement is to enable Ship to Objective Maneuver (STOM) at the tactical level over a 200 nautical-mile area with minimum ground infrastructure. It must provide an assured OTM capability to dismounted tactical maneuver units, fires and logistic assets operating in complex terrain. After review of the Universal Needs Statement, the Commanding General of MCCDC directed the Lab investigate capabilities for experimentation in the SV04 AWE. Due to current contingency operations that impacted the availability of FMF users, the ETCS Extended User Evaluation (EUE) portion of the SV04 AWE will be conducted with II MEF and Joint Horn of Africa forces OCONUS.

**Description:** ETCS is a modified version of the Iridium system that will provide netted (one-to-many) push-to-talk communications vice the current point-to-point, dial-up capability. The system is based upon a modified Motorola 9505 handset with an integrated Global Positioning System and a Group Radio Controller to manage the voice/data traffic and the individual nets. ETCS will be fitted aboard ship and in an OTM Combat Operations Center in the SV06AWE that is scheduled for June 2006. It will be integrated with current Marine Corps Systems such as the Intelligence Operations Workstation (IOW) and the Command and

## EXPEDITIONARY TACTICAL COMMUNICATIONS SYSTEM

### *fact sheet*



Control Personal Computer (C2PC) application to provide extended netted communications without ground infrastructure over greater distances than the required 200 nautical miles. With MCWL's Command and Control Integration project, ETCS will support injection of blue PLI into C2PC.

**Deliverable Product:** A system of 430 Global Net Radios integrated with Marine Corps systems such as IOW and C2PC that will enable STOM and Distributed Operations (DO) experimentation. The results of this experimentation will provide recommendations for the development and transition of an OTH/OTM communications capability for the future Marine Air-Ground Task Force.

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